

WHAT IS CLAIMED IS:

1. An exposure control device for adjusting light amount received by a focusing device and a photoelectric conversion device of an image scanning apparatus, comprising:

a control unit asserting a control signal according to a certain condition of said image scanning apparatus; and

a light-transmission adjusting device arranged in the light path to said focusing device and said photoelectric conversion device and changing an effective light-transmission area thereof in response to said control signal to adjust light amount passing therethrough.

2. The exposure control device according to claim 1 wherein said light-transmission adjusting device comprises:

a driving unit controlled by said control unit to generate a driving force in response to said control signal; and

a movable optical grid plate optionally driven by said driving force to change a position thereof so as to change said effective light-transmission area.

3. The exposure control device according to claim 2 wherein said driving unit comprises a motor and said optical grid plate is moved by rotation.

4. The exposure control device according to claim 1 wherein said light-transmission adjusting device comprises:

a driving unit controlled by said control unit to generate a driving force in response to a first state of said control signal;

a first optical grid plate arranged in the light path to said focusing device and said photoelectric conversion device, and having a first light-transmission area; and

a second optical grid plate having a second light-transmission area smaller than

said first light-transmission area, and optionally driven by said driving force to be aligned with said first optical grid plate so as to reduce said effective light-transmission area.

5. The exposure control device according to claim 4 wherein said driving unit comprises a motor coupled with said second optical grid plate for rotating said second optical grid plate to further change said effective light-transmission area according to another condition of said image scanning apparatus.

6. The exposure control device according to claim 1 wherein said light-transmission adjusting device comprises a liquid crystal screen electrically connected to said control unit, and changing said effective light-transmission area in response to said control signal by varying darkened pixels.

7. The exposure control device according to claim 1 wherein said certain condition of said image scanning apparatus is a selected resolution of said image scanning apparatus.

8. The exposure control device according to claim 7 wherein said effective light-transmissible area under high resolution is smaller than that under low resolution.

9. The exposure control device according to claim 1 wherein said certain condition of said image scanning apparatus is a predetermined comparing result of a voltage value of an output signal from said photoelectric conversion device with a threshold value.

10. The exposure control device according to claim 9 wherein said effective light-transmissible area is enlarged when said voltage value of said output signal is smaller than said threshold value.

11. The exposure control device according to claim 1 wherein said control unit comprises an application specific integrated circuit (ASIC) for asserting said

control signal according to said certain condition of said image scanning apparatus.

12. An exposure control device for adjusting light amount received by a focusing device and a photoelectric conversion device of an image scanning apparatus, comprising:

a control unit asserting a control signal according to a certain condition of said image scanning apparatus;

a driving unit controlled by said control unit to generate a driving force in response to said control signal; and

a movable optical grid plate optionally driven by said driving force to change a position thereof so as to change an effective light-transmission area.

13. The exposure control device according to claim 12 wherein said driving unit comprises a motor and said optical grid plate is moved by rotation.

14. The exposure control device according to claim 12 wherein said certain condition of said image scanning apparatus is a selected resolution of said image scanning apparatus.

15. The exposure control device according to claim 14 wherein said effective light-transmissible area under high resolution is smaller than that under low resolution.

16. The exposure control device according to claim 12 wherein said certain condition of said image scanning apparatus is a predetermined comparing result of a voltage value of an output signal from said photoelectric conversion device with a threshold value.

17. The exposure control device according to claim 16 wherein said effective light-transmissible area is enlarged when said voltage value of said output signal is smaller than said threshold value.

18. An exposure control device for adjusting light amount received by a focusing device and a photoelectric conversion device of an image scanning apparatus, comprising:

a control unit asserting a control signal according to a certain condition of said image scanning apparatus; and

a liquid crystal screen electrically connected to said control unit, and changing said effective light-transmission area in response to said control signal by varying darkened pixels.

19. The exposure control device according to claim 18 wherein said certain condition of said image scanning apparatus is a selected resolution of said image scanning apparatus.

20. The exposure control device according to claim 18 wherein said certain condition of said image scanning apparatus is a predetermined comparing result of a voltage value of an output signal from said photoelectric conversion device with a threshold value.